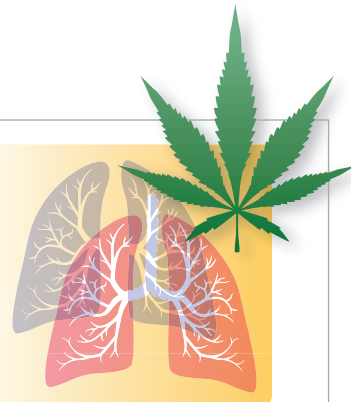


## Smoking Marijuana and the Lungs

Marijuana, also known as cannabis (can-a-bis) is the second most commonly smoked substance after tobacco. Despite marijuana's legalization in many states, it may be harmful to your health, particularly if you have lung disease or other medical conditions.



The harmful effects of tobacco smoke are well known, but we have less information about the health effects of marijuana. Few research studies have been done since marijuana remains illegal in most countries, and since marijuana can be inhaled in many ways (e.g. water pipes, joints, vaping etc). It is likely that in frequent users (and some less frequent users), marijuana harms the lungs, and that there is not a safe way to smoke marijuana.

### How can smoking marijuana damage my lungs?

Tobacco smoke of **any** kind is a common cause of *bronchitis* (swelling and inflammation of the airways/breathing tubes) and/or chronic obstructive pulmonary disease-*COPD* (see ATS Patient Series on COPD at <http://www.thoracic.org/patients/patient-resources/>). Heavy marijuana smokers also are likely to develop lung damage because marijuana smoke contains many of the same harmful chemicals as tobacco smoke. We do not know if smoking a small amount of marijuana (for example, light users who smoke an amount equal to 1-2 joints a month) over a long period of time increases your risk for developing COPD. We do know that in some people (especially those with lung problems), smoking marijuana can make their breathing worse.

Smoking marijuana also can cause large air sacs, called bullae, to develop in the lung. This is more likely to happen in younger marijuana smokers (less than 45 years old). It is not clear why some marijuana smokers develop bullae while others do not. Bullae

can cause you to be short of breath and may rupture ("pop"). Air leaking from a ruptured bullae leads to a collapsed lung; a potentially life-threatening condition also called a pneumothorax.

Marijuana can also make many existing lung conditions worse. For example, if you have asthma, marijuana smoke can cause an asthma attack leading to hospitalization and even death. Smoking marijuana is not recommended for anyone with an existing lung disease. Furthermore, if you have a serious lung condition and need a lung transplant, marijuana use can make you ineligible to receive a transplant.

### What symptoms may indicate that smoking marijuana is affecting my lungs?

Marijuana smoke (like tobacco) causes coughing, increased sputum ("phlegm") and wheezing. Also, marijuana can cause shortness of breath and swelling in your throat. When you stop smoking, you can expect your symptoms to improve and possibly go away completely.

### Does smoking marijuana increase my risk of getting lung cancer?

Marijuana smoke may increase your risk of lung cancer. Marijuana smoke contains over 450 unique chemicals including many cancer-causing chemicals (carcinogens) similar to tobacco smoke.

If you have lung cancer and are on treatment, smoking tobacco increases your risk of dying and decreases how well the cancer treatment works. This may be true for marijuana as well.

### Can smoking marijuana increase my risk for lung infections?

Marijuana smokers can develop a lung infection from a mold called “aspergillus” (read about Aspergillosis at <http://www.thoracic.org/patients/patient-resources/>). Aspergillus lives on marijuana plants and is inhaled in marijuana smoke. Aspergillus causes pneumonia and even death. People with weak immune systems, such as those who have had an organ transplant, are on chemotherapy or take drugs that weaken the immune system are at increased risk for this infection. Smoking marijuana is not recommended if you have cancer, are taking chemotherapy, have had a lung transplant, or have a weak immune system.

### Hasn't marijuana been used to treat people with health problems?

Marijuana has been used to treat many conditions such as nausea and chronic pain. Several states allow health care providers to prescribe medical marijuana for health reasons. However, marijuana is not approved by the FDA (Food & Drug Administration) for any known medical condition. The FDA has approved medications containing marijuana's active ingredient THC (tetrahydrocannabinol) for treatment of pain and nausea that may be prescribed by your health care provider.

### Can smoking marijuana help me sleep?

Marijuana causes drowsiness, but has not been studied as a way to help you sleep. Marijuana use (and withdrawal from regular use) has been shown to cause sleep problems that may last weeks after stopping.

### Is there a way to smoke marijuana safely?

Marijuana can be inhaled in many different ways, including joints, electronic cigarettes, water bongs (read about Hookah Pipes at <http://www.thoracic.org/patients/patient-resources/>) and vaporizers. None of the available delivery devices have been studied in detail to safely say they will *protect* you from the harmful effects of the smoke. No method of inhalation can therefore be considered safe.

### What about people who are exposed to the smoke from marijuana?

Second-hand smoke (inhalation of another person's marijuana smoke) can cause serious health problems, especially in infants and children or anyone with a chronic lung condition. Second-hand marijuana smoke contains many poisons including cyanide and ammonia.

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## Rx Action Plan

- ✓ Let your health care provider know if you smoke marijuana
- ✓ Talk with your health care provider if you smoke marijuana while being treated for lung cancer
- ✓ If you smoke marijuana for nausea or pain, talk to your doctor about other options to treat your symptoms
- ✓ Avoid smoking marijuana around children, especially if they have lung problems

**Healthcare Provider's Contact Number:**

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Resources:

#### National Institute of Drug Abuse

<http://www.drugabuse.gov/publications/drugfacts/marijuana>

#### Cancer Research UK

<http://www.cancerresearchuk.org/about-cancer/cancers-in-general/%20cancer-questions/does-smoking-cannabis-cause-cancer>

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